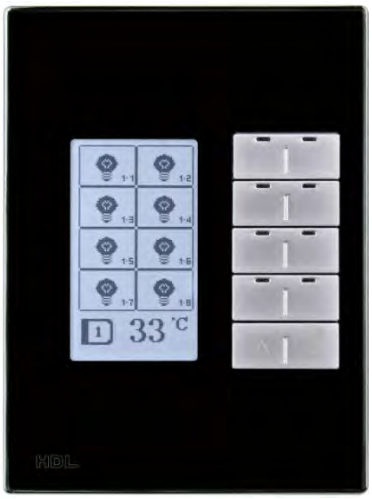
HDL®

User Manual

DLP Series

MPL8.48

MPL8.46



buspro

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Document updates:

Version	Date	Description
V1.0	2015.01.20	Finish new document

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1. Overview

1.1 General Information

1.1.1 Description

The multi-functional LCD panel is a new generation of wall mounted switch, with a total of 8 metal buttons each with a configurable LED. Both the plate and frame can be customized with different materials and colors to perfectly match your lifestyle.

1.1.3 Serial Numbers

HDL-MPL8.46
US standard

HDL-MPL8.48
EU standard

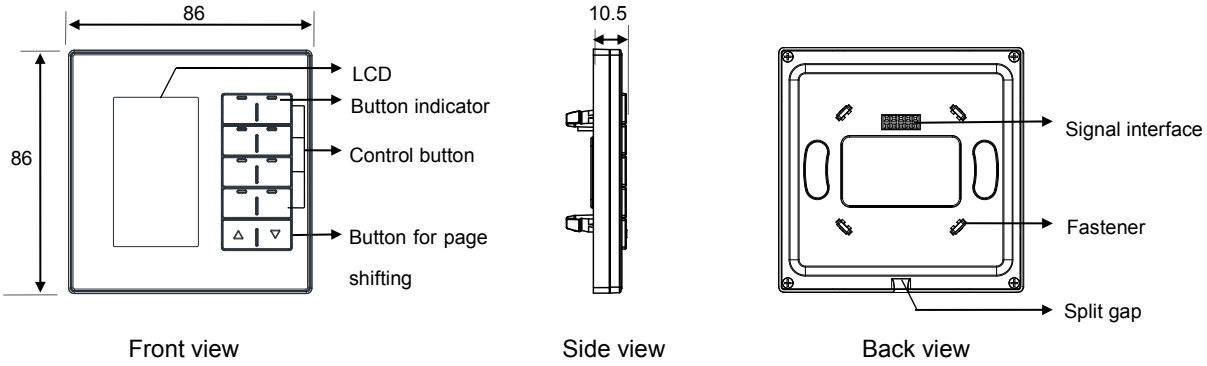
1.2 Function Qualities Description

- Adjustable LCD Backlight and LED Indicators.
- Multiple pages- A specified page for Floor Heating, HVAC, and Music control is available.
- Each of the keys can have a user designed icon installed.
- Single button combinations and double button combinations are available.
- The mutual exclusion of buttons is available.
- Multi Key Mode: Invalid, Single on-off, single on, single off, Combination on-off, combination on, combination off, double click/single on-off, double click/combination on-off, momentary, clock, short/long press, short press/long momentary press, hyperlink.
- Multi Key control Modes: Scene, Sequence, timer switch, universal switch, single channel on-off, broadcast scene, broadcast channel, curtain, GPRS Control, Panel Control, alarm control, music play, General control.
- The following functions are included: IR Receiver, Lock, Turn on/off AC, Cooling &

heating for AC. Auto temperature setting, Fan Speed regulation, AC Mode setting, AC Temperature regulation, backlight adjustment, AC Lock, Backlight and status light setting, floor heating temperature and mode setting etc.

- Communication : HDL Buspro
- Support online upgrade.
- Working with panel power interface.

1.3 Device Description



Front view　　Side view　　Back view

2. Technical Data

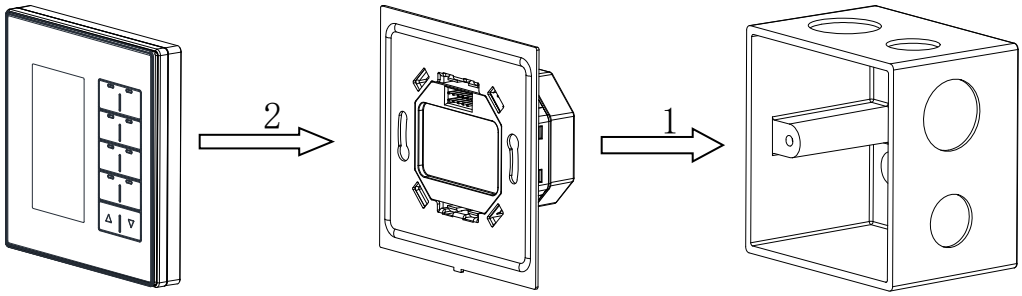
	MPL8.48	MPL8.46
Electric Parameter ：		
Power Supply	DC24V(from HDL-MPPI.48)	DC24V(from HDL-MPPI.46)
Power Consumption	30mA/DC24V(from HDL-MPPI.48)	30mA/DC24V(from HDL-MPPI.46)
Environmental Condition：		
Working	0℃~45℃	
Working relative	Up to 90%	
Storage temperature	-20℃~+60℃	
Storage relative	Up to 93%	
Approved		
CE		
RoHS		
Production information：		
LCD resolution	240×80	

Dimensions	86×86×10.5 (mm)	86×116.5×10.5 (mm)
Weight	141.5(g)	166(g)
Housing material	Glass/Aluminum, ABS, PC	
Installation	EU Wall Box	US Wall Box
Protection degree	IP20	

3. Installation

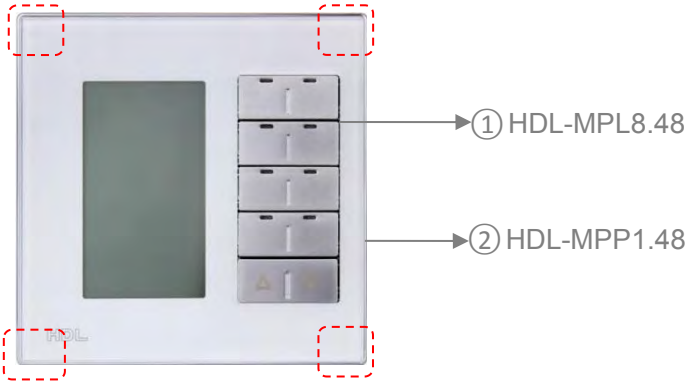
3.1 Connecting

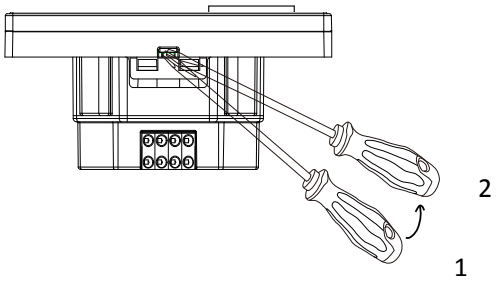
Please follow the below installation method.



Panel （MPL8.48）　　Panel power interface （MPPI.48）　　EU wall BOX

Installation: Hold the panel vertically then slowly insert it into the power interface module. Press gently on the four corners of the module to ensure an optimum coupling.





Separate the panel and the power interface

Separation : Insert the tip of a slotted head screwdriver into the split gap indicated in the diagram. Pry up and down, and the wiring hole will open. Then separate the panel and MPPI.48.

3.2 HDL BUS Pro Description

Connector Information

buspro	
DC24V	Red
COM	Black
DATA-	White
DATA+	Yellow

3.3 Commissioning

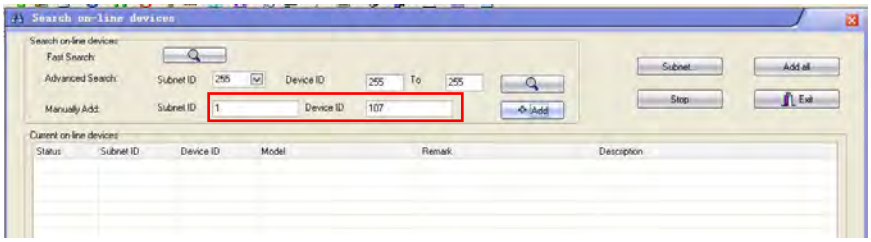
a) On the button menu, long press the first and last button for 3 seconds, as shown below.

b) A new window will appear from the window, select “SYSTEM”.

c) In the new window, you will find a number of addresses from 001—107.

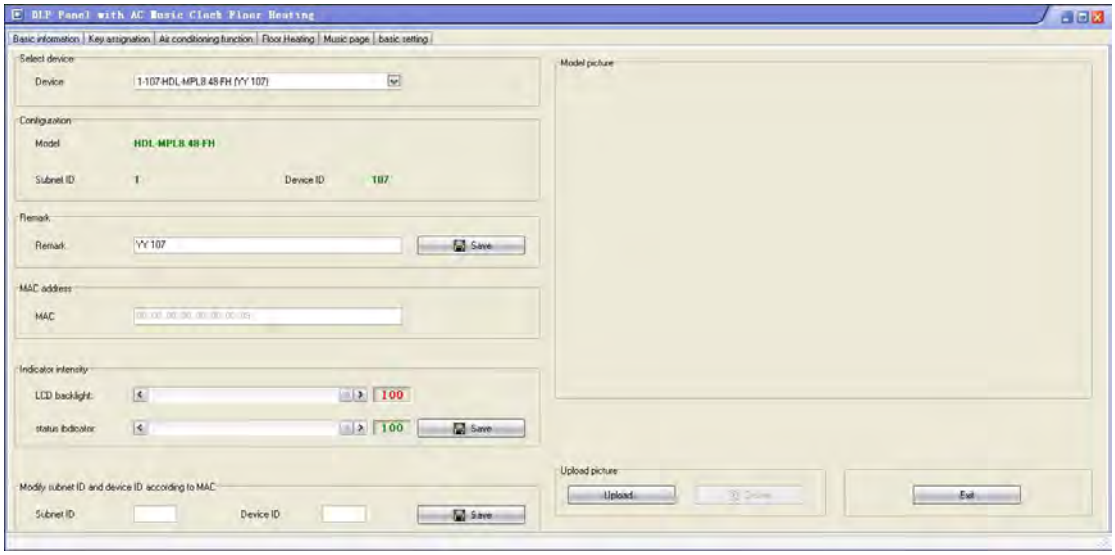
d) Open the HDL-BUS Pro Setup tool.

e) Click the search button, it will show a new window, fill in panel’s ID, and click the “+ADD” button, then search for the panel. Clicking the “Add all” button, will add the panel to the “ON-line devices” list.



4. Software Configuration

4.1 Basic setting



4.1.1 Change the ID of the device

Every HDL-BUS device has one Subnet ID and one Device ID. The Device ID should be unique in its Subnet, and the Subnet ID should be kept consistent with the Gateway (typically the SB-DN-1IP or HDL-MBUS01IP.431).

4.1.2 Remark

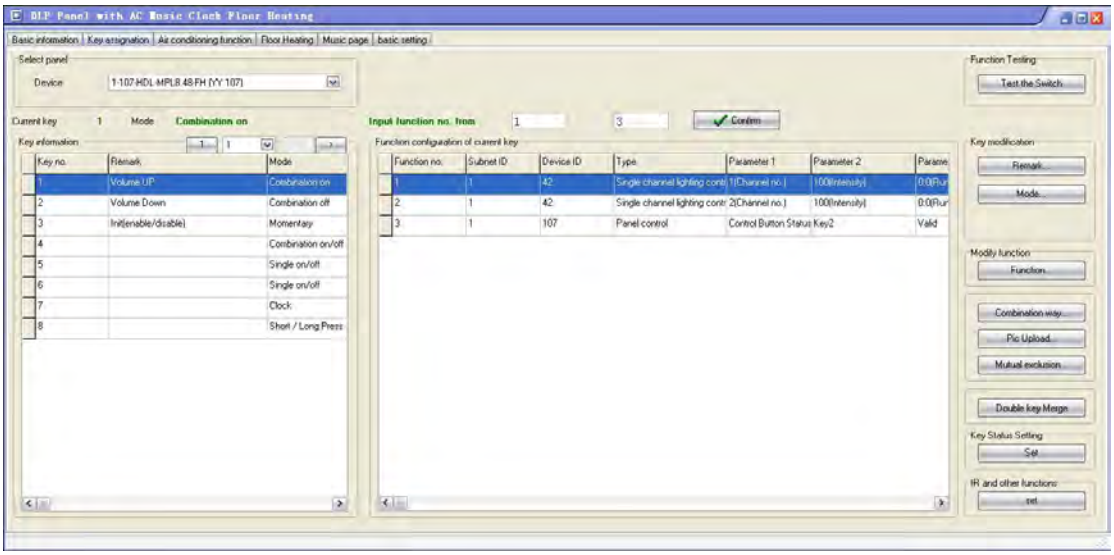
It is recommended that a description is given to the ID, to aid future system changes.

4.1.3 Indicator intensity

The brightness of the LED indicators and the LCD backlight can be adjusted, the backlight intensity can also be adjusted on DLP panel setting page.

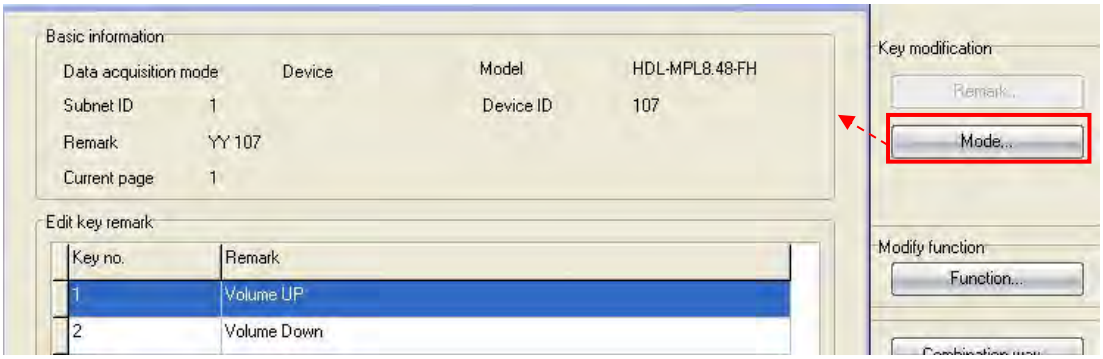
4.2 Assigning designations for keys

The DLP has 7 pages. The first 4 pages are generic control pages, page 5 is an AC page, page 6 is a music page and page 7 is a floor heating page. The interface setting for page 1 to 4 in HDL-BUS Pro Setup Tool is shown in the below screen shot.

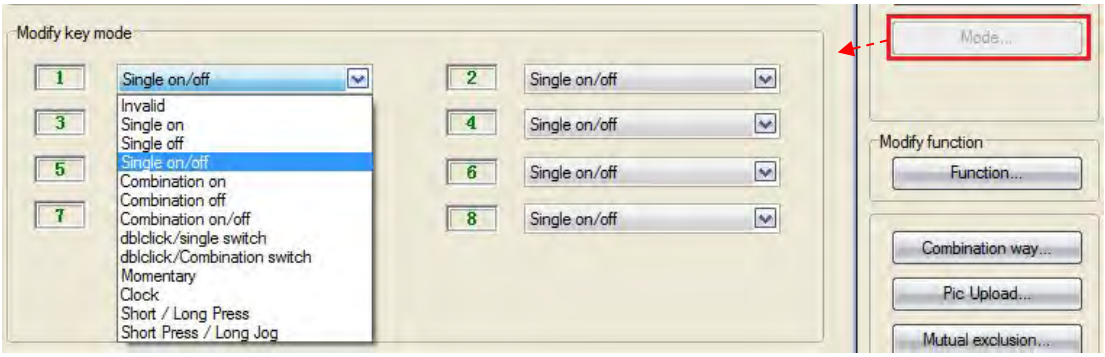


4.2.1 Remark

It is recommended that a description is given to each key, to aid future system changes.



4.2.2 Mode



Key mode:

Single on

If this is assigned the Switch can turn on one target only (one channel, one scene, one sequence, etc.)

Single off

If this is assigned the Switch can turn off one target only (one channel, one scene, one sequence, etc.)

Single on/off

If this is assigned the Switch can turn on/off one target only (one channel, one scene, one sequence, etc.)

Combination on

If this is assigned the Switch can turn on multiple targets (channels, scenes, sequence, etc.)

Combination off

If this is assigned the Switch can turn off multiple targets (channels, scenes, sequence, etc.)

Combination on/off

If this is assigned the Switch can turn on/off multiple targets (channels, scenes, sequence, etc.)

Dblclick/single switch

Double clicking can control up to 49 targets, a single click can only control 1 target

Dblclick/combination switch

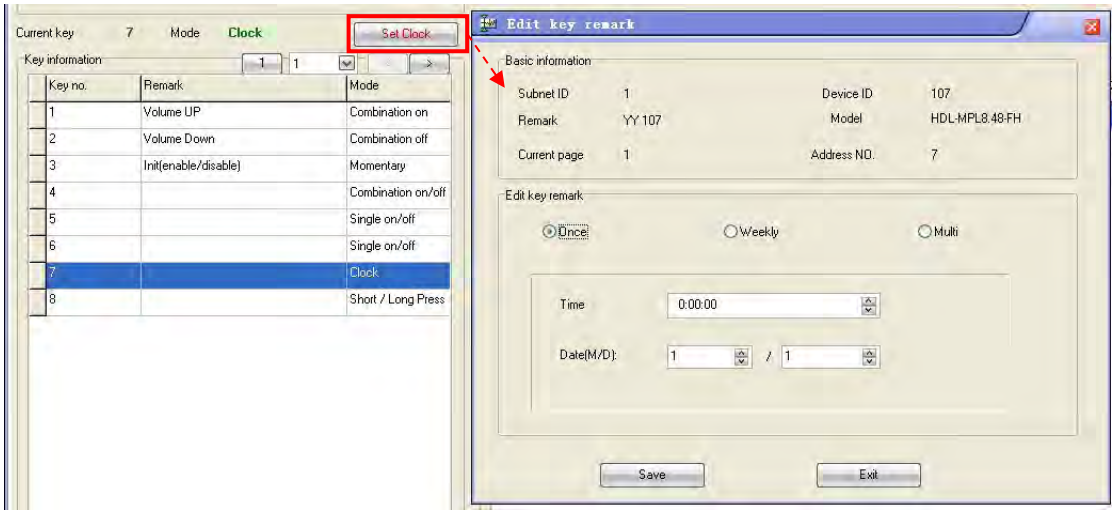
Both double click and combination switch can control up to 49 targets

Momentary

Press to turn on the target, release it to turn off a target.

Clock

Selecting the clock allows you to set the time you wish to trigger a target automatically. Double click the panel key to enable/disable the clock function.



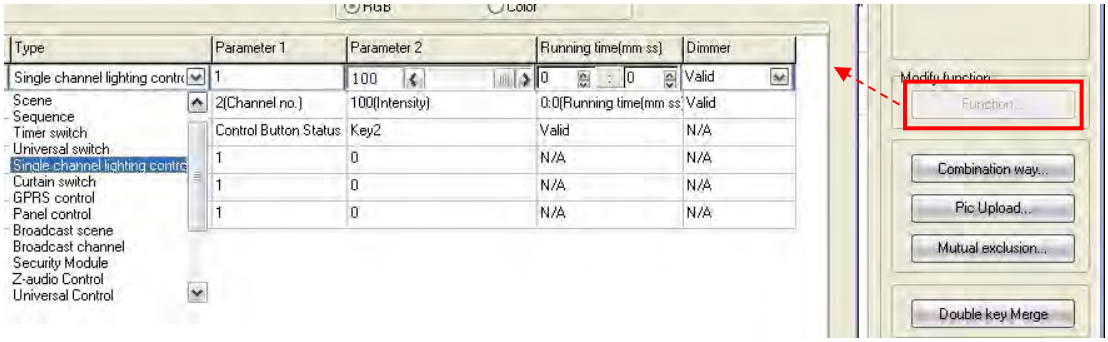
Short /long press

Both short press and long press can control up to 49 targets

Short /long Jog

Both short press and long Jog (long press to turn on, release to turn off) can control up to 49 targets

4.2.3 Function



Key type:

Scene

Enables a user to turn a scene on or off

Sequence

Enables a user to turn a sequence on or off

Timer switch:

Old command, abandoned

Single channel lighting control

Enables a user to turn a channel on or off

Curtain switch

Enables a user to control the curtain module (stop/open/close)

GPRS control

Enables a user to turn a send a message via the SMS module

Panel control

Shield button/page, control the AC and floor heating module, etc.

Enables a user to turn on or off all of the areas within the same scene.

Broadcast channel

Enables a user to turn on or off all the channels in one Dimmer, Relay or DMX controller.

Security module

Enables a user to control the security module.

Z-audio control

Enables a user to control the Z-Audio module.

Universal control

Enables a user to control the basic settings of a device from a panel. This feature makes the system more flexible for end-users. For more information, please refer to the universal control command_ 12in1.xls, which can be download from:

ftp://59.41.255.150/HDL-BUS/HDL-BUS%2Products/ Sensors/SB-CMS-12in1/

Link page

Enables a user to turn immediately to a designated page in the DLP menu.

DALI Area dimmer

Enables a user to control a group of DALI ballasts, including dimming, via the SB-DN-DALI64 module.

RGB control

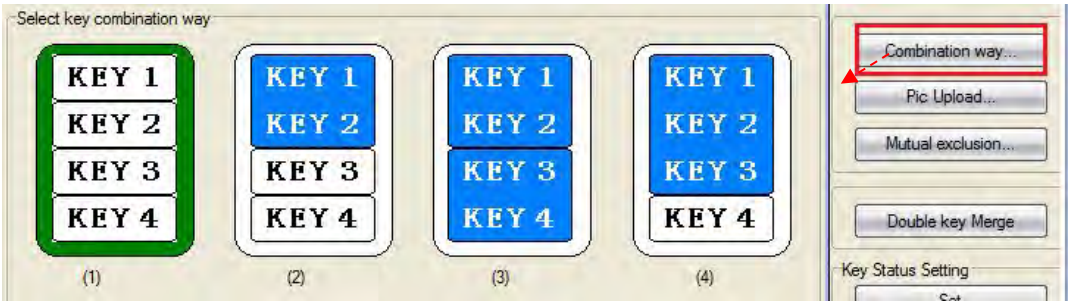
For HDL-MLED0605.432, 48DMX and 512DMX module (not ready to use)

IR control

For HDL Matrix device (not ready to use)

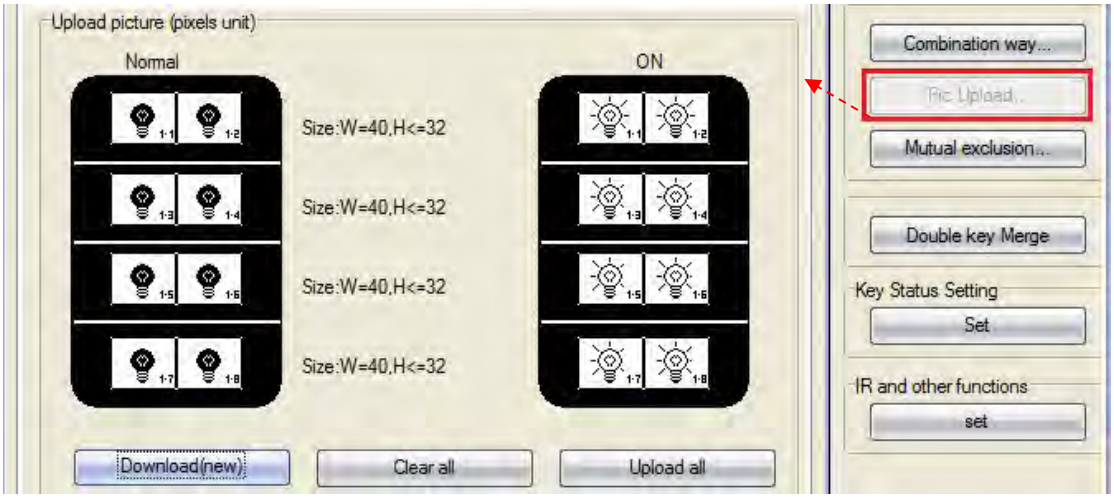
4.2.4 Key combinations

When the keys are combined, only the functions of the top button will be active.



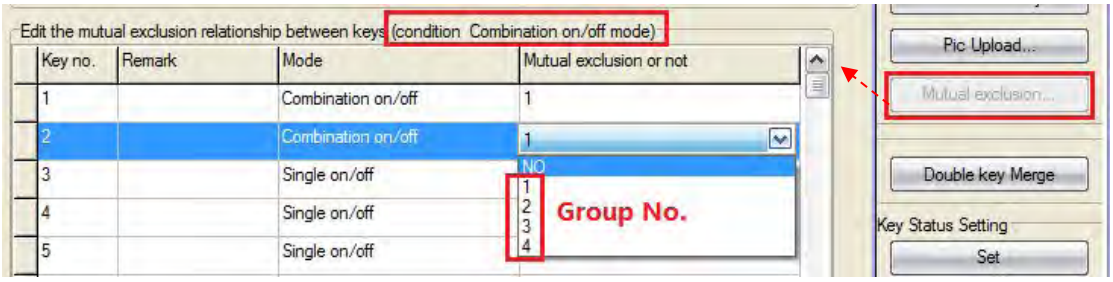
4.2.5 Pic upload

To change the icon for a key, double click on a key and then click on the Pic Upload tab. The inactive icons are represented by the left hand 'normal' column, the active icons are represented by the right hand 'on' column.



4.2.6 Mutual exclusion

The key combination mode allows combination on, combination on/off, and mutual exclusion groups to be set. After a mutual exclusion group has been set, only the last key controlled can indicate its status (on), the status of other keys in mutual exclusion group will be off.



The mutual exclusion groups can enable the scenarios described below,

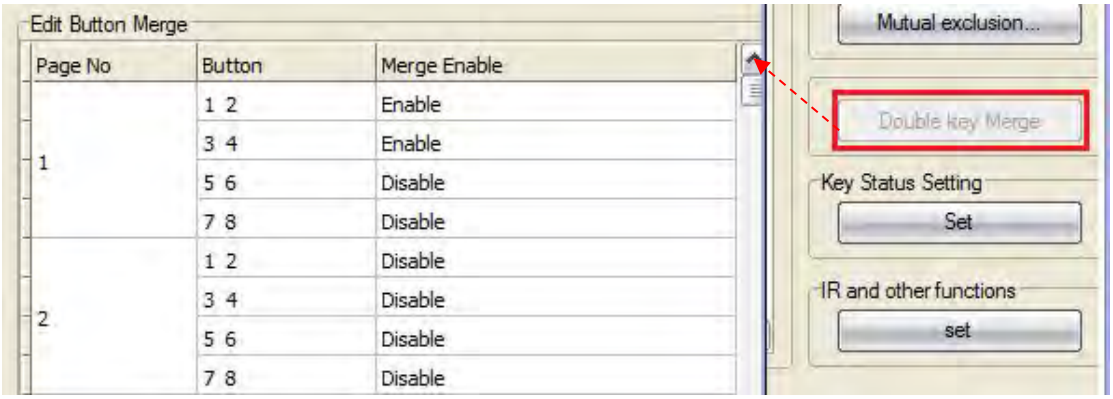
Key1 control (combination on) channel1 and 2 with a dimming level of 30%

Key2 control (combination on) channel1 and 2 with a dimming level of 60%

Key3 control (combination on) channel1 and 2 with a dimming level of 90%

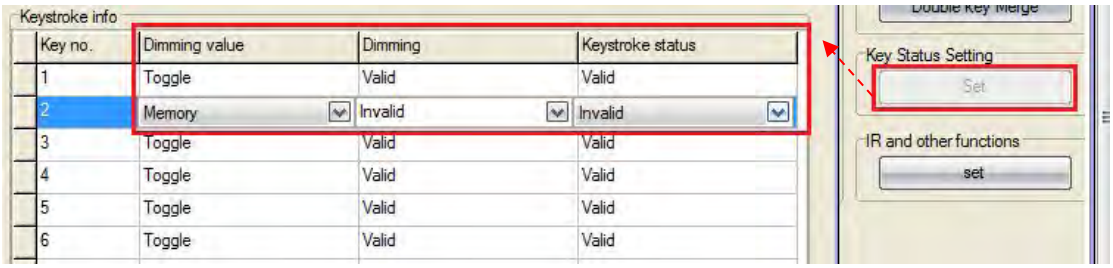
Pressing keys 1, 2, and then three, will set the keys three LED indicators of both channels to 90%. If the mutual exclusion group is set to three keys, then the LED indicator of the key last pressed will be on, while the other indicators are off.

4.2.7 Double key merge



As an example if keys 1 and 2 are merged, then both keys will act as a single key. The functions of the right key (key 2) are the same as the left key (key 1).

4.2.8 Key status setting



Dimming value

The dimming value can be toggled when turning on the light, if this is done, the brightness can reach 100%.

Toggle- if selected, when turn on light, the brightness will go to 100%.

Memory- if selected, when turn on light, the brightness will go to last brightness before turn off

Dimming:

Valid- enable dimming when long pressed

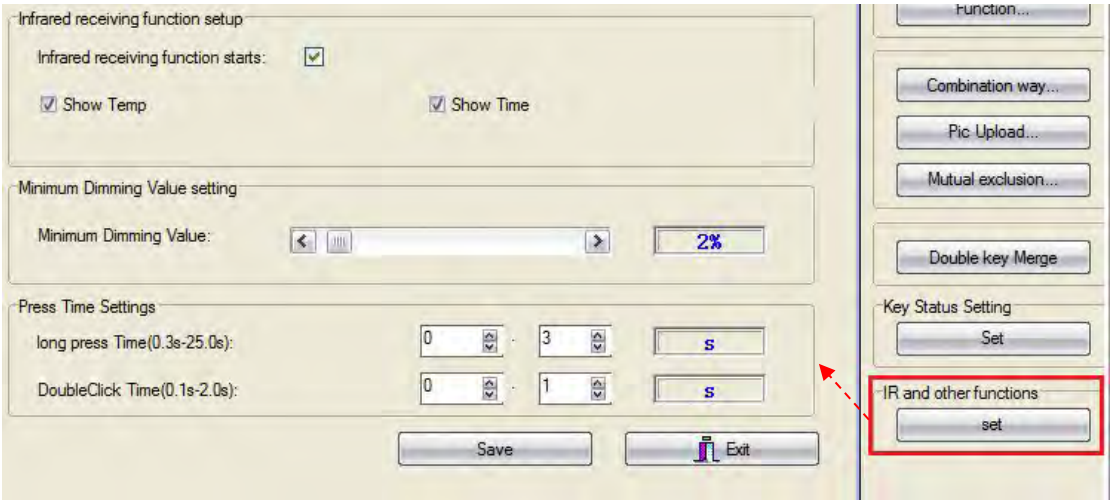
Invalid- Disable dimming, just on/off

Keystroke status:

Valid - Enable the LED indicator of the key

Invalid - Disable the LED indicator of the key

4.2.9 IR and other functions



Infrared status

Allows a user to enable or disable the reception

Enable/disable the IR receiving function (accept HDL remote controller only)

Show temp

Enable/disable the DLP to display the temperature at the bottom of the LCD display.

Show time

Enable/disable the DLP to show the time at the bottom of the LCD display, the time is broadcasted by SB-DN-Logic960.

Minimum dimming value

Set the dimming lower limit.

The Lower limit is useful if you would like to skip the low level segment and dim from a certain level, say 40%. You want to skip it because maybe lower than 40% is impractical for you or maybe the load quality is not so good and trembles when at low level segment.

Long press time

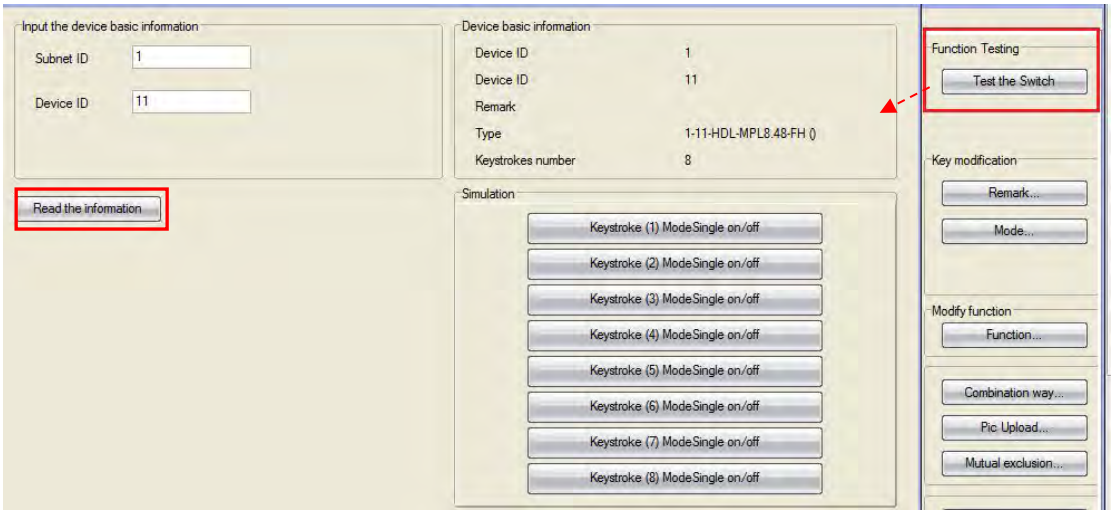
Set time for long-press, define the long press by end-user.

Double click time

Set time for double-click, define the double click by end-user.

4.2.10 Test the Switch

Test the key function in the software, rather than press the physical button.



4.3 AC function page

Please refer to ‘UM_SB-DN-HVAC(MAC01.331).pdf’

Download it from:

ftp://59.41.255.150/en(enlish)/HDL%20Buspro/HDL%20Buspro%20Products/SB-DN-HVAC%20%20%20MAC01.331/

4.4 Floor heating page

Please refer to ‘UM_HDL-MFH06.432(Floor Heating Controller).pdf’.
Download it from: ftp://59.41.255.150/HDL-BUS/HDL-BUS%20Products/HDL-MFH06.432

4.5 Music page

Please refer to ‘UM_SB-Z-AUDIO(Digital Background Music Player)’,

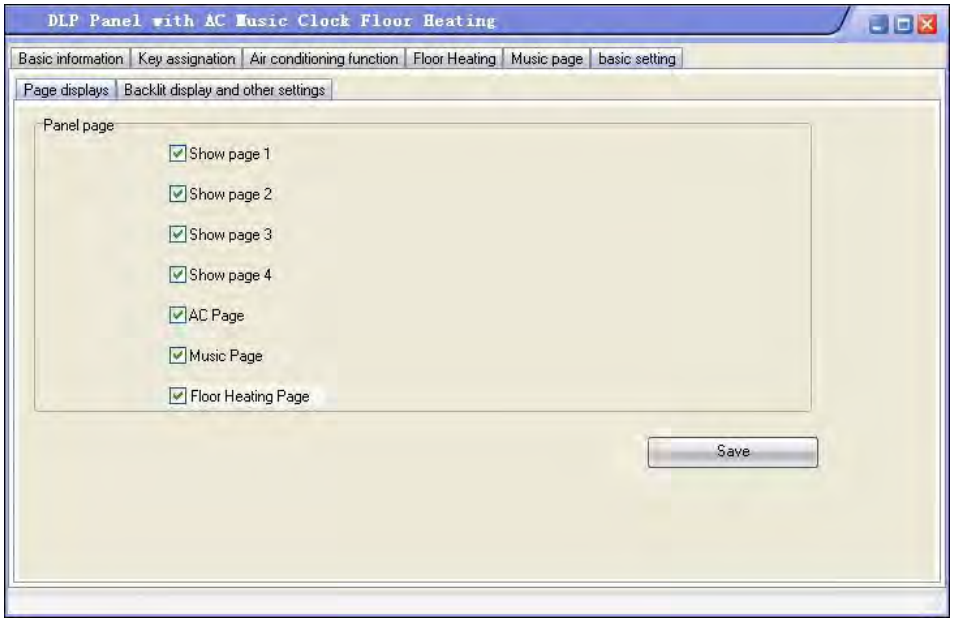
Download it from:

ftp://59.41.255.150/en(enlish)/HDL%20Buspro/HDL%20Buspro%20Products/SB-Z-Audio

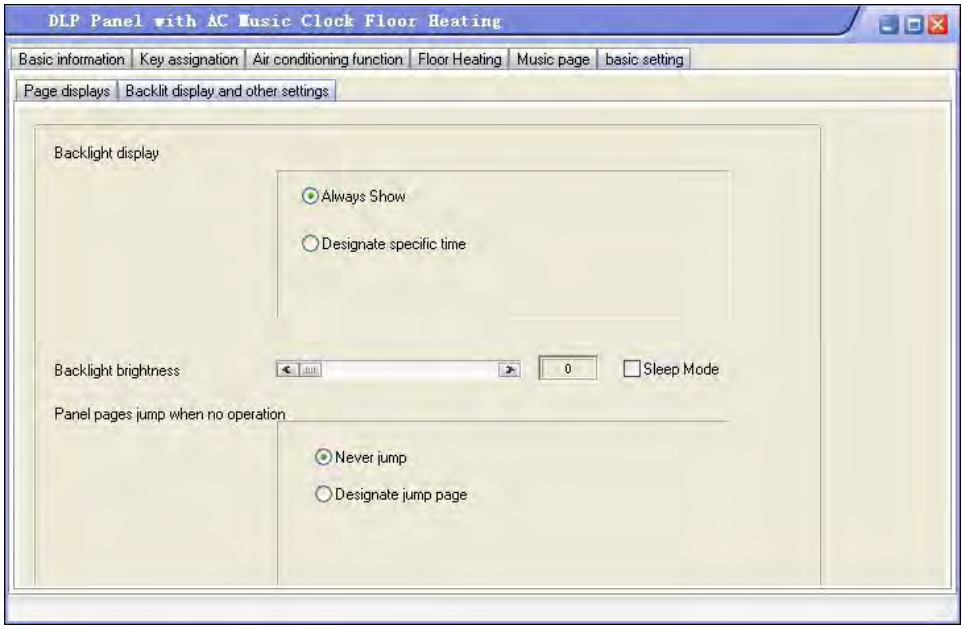
4.6 Basic setting

4.6.1 Page displays

Page display: the pages selected will be displayed on the panel.



4.6.2 Backlit display and other settings



Backlight display:

-- Always show：the backlight will be on always

-- Designate specific time： the backlight will dim down after no operation in the designated time

Backlight brightness: can change the backlight brightness.

Sleep mode:

In power save mode, if select “sleep mode”, the first time to press the button, only lighten the backlight, the second time to press the button will send out command; if unselect “sleep mode”, it will lighten the backlight and send out the command at the first time.

Note: the HDL-BUS Pro software version should be V10.18.03.08 or above.

Panel pages jump when on operation:

--Never jump: never jump after no operation in the designated time.

--Designate jump page: jump to the specific page after no operation in the designated time

5. DLP Setting Page

Long press the first button (key1 or key2) and the fourth button (key7 or key8) to enter into the setting page.

System:

Inside this item, long press the key1 or key2, you can modify the ID of the DLP (Subnet ID and Device ID), other functions in this item are straightforward to set.

Password:

You can set password for each page, when user forgets his/her 4-digit password, he/she can use the almighty password to unlock the page - 8465.

IR select:

Please refer to the doc – “08- SB-HHR-D.ppt”.
Download it from: ftp://59.41.255.150/HDL-BUS/HDL-BUS%20Training%20Course/Training%20Course/

Date Time:
In this item, you can specify the ID of SB-DN-Logic960 and the correct time and then long-press the key1 (or key2), “OK!” will then be shown, the clock in SB-DN-Logic960 is now corrected. (SB-DN-Logic960 has a real time clock).

Language:
Choose language – 中文 or English.

6. FAQ

6.1 Panel FAQ001_HDL BUSpro

Q:
We can use DLP to arm and disarm HDL's security system (SB-DN-SEC250K), but how can I prevent intruders to disarm my security system?
A:
You can set password to protect your security operation page on DLP (long press the first and fourth buttons at the same time on SB-DLP,
long press the first/second and seventh/eighth buttons at the same time on HDL-MPL8.48).

6.2 Panel FAQ002_HDL BUSpro

Q:
There are "single on/off" key mode and "combination on/off" key mode, we find that the key with former key mode works correctly, the led indicator indicates
the on/off status correctly, but the latter one does not work that well, e.g., if I press the key to turn on the loads, the loads are on and so is the key indicator,
no problem about that, but if now I use other keys to turn off the loads, the "combination on/off" key indicator is still on, problem!
A:
When some of loads are on and some are off, then it is dilemma for the key indicator, so

the key indicator of this key mode is designed so that it just toggles when you press it, that is all. However, there is a solution for the problem you met, simply add one more command in your "other keys", i.e., "Panel control -> control button status",
send this command to the "combination on/off" key to turn on or off the key indicator directly.

6.3 Panel FAQ003_HDL BUSpro

Q:

I have three keys, all of them are set as "combination on" keys, and all of them are configured to control the same two loads, but 30%, 50% and 80%, respectively.
After the configuration, I find that when I press the first key, loads are 30% and the key 1 indicator is on, when I go on to press the second key, the loads are 50%
and both key 1 and key 2 indicators are on, when I press key 3, loads are 80% and all of the key indicators are on, this is not a problem, but for me, ideally, I would
like only one key indicator is on, which is the last one I pressed, is it possible?

A:

Yes, You can refer to FAQ2, another method is to set these three keys in "mutual exclusion", mutual exclusion works just as you have described - only the last pressed
key is on, all the other indicators for mutual exclusion keys (which are in the same mutual exclusion group) are off.

6.4 Panel FAQ004_HDL BUSpro

Q:

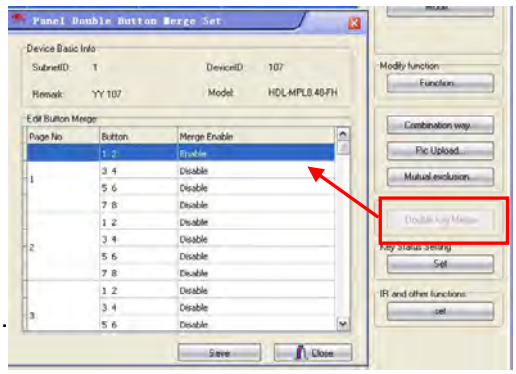
The HDL-MPL8.48 has four physical keys (well, 8, actually, left and right) and two physical page-turning keys. I am trying to setup function like this: left key for dimming down,
right key for dimming down, is it possible?

A:

Yes, please follow the steps:

1) button 1 : mode single on
2) button 1 : single channel control ON
3) button 2 : mode single off
4) button 2 : single channel control OFF
5) put button 1 and 2 in a group,

use“Double key Merge,please refer to the screen shots.



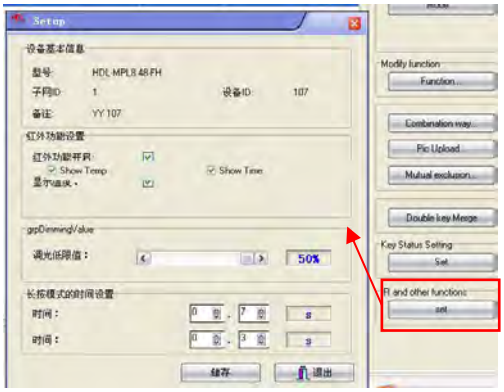
6.5 Panel FAQ005_HDL BUSpro

Q:

Whenever I long press a button and try to dim up, I always want to dim to at least 50%, so any level lower than 50% is not practical at all for me, can I bypass the lower segment and dim upward from 50%, this saves me just a little pressing time, but still, is it possible?

A:

Yes, there is minimum dimming setting in the Panel, please check the screen shot below.



6.6 Panel FAQ006_HDL BUSpro

Q:

I can preset whether to save my customized level or not so that next time I turn it on it can recall my customized level or simply go to 100%, but If I choose the
former option and the load happens to be, e.g.,
fluorescent light, if you dim it too low and save, next time it is hard for you to turn it on, it is due to the characteristic of the gas-discharging light, not the problem
of the Dimmer, but in this case I need to limit the dimming range somehow. Even if I have a good load that can be dimmed from 0% to 100%, if the kids dim it to 1%, then
still it is hard to notice it is on, you press it again and again, it just toggles between 0% ad 1%, both are not so much noticeable. In both cases, chances are the end-user
will call me at midnight, how can I prevent this?

A:

There is such setting in the Panel, please refer to FAQ5.

7. NOTES

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